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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,011	07/22/2003	Russell R. Krug	T-6080	8430
34014	7590	01/18/2005	EXAMINER	
CHEVRON TEXACO CORPORATION P.O. BOX 6006 SAN RAMON, CA 94583-0806			MCAVOY, ELLEN M	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/625,011

Applicant(s)

KRUG ET AL.

Examiner

Ellen M McAvoy

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October and 12 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-15 and 17-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-30 and 35-38 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-15, 17-24 and 31-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7 October 2004</u> . | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-15, 17-24 and 31-34 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (5,378,348).

Applicants' arguments filed 12 October 2004 and 12 November 2004 have been fully considered but they are not persuasive. As previously set forth, Davis et al ["Davis"] disclose the production of middle distillates useful as diesel or jet fuels from a Fischer-Tropsch hydrocarbon synthesis process. Davis teaches that the Fischer-Tropsch process can produce a wide variety of materials depending upon the catalyst and process conditions. Davis teaches that a typical product slate is set forth in Table A in column 2 which can vary by  $\pm 10\%$  for each fraction. As set forth in Table A, the initial boiling point (IBP) to 320°F fraction is present in 13 wt.%, the 320-500°F fraction is present in 23 wt.%, the 500-700°F fraction is present in 19 wt.%, the 700-1050°F fraction is present in 34 wt.%, and the 1050°F to final boiling point fraction is present in 11 wt.%. The examiner maintains the position that the typical product slate from Fischer-Tropsch process liquids set forth in Table A clearly meets the limitations of the Fischer-Tropsch (F/T) derived fuel compositions having the boiling point distribution set forth in the above rejected claims. In the remarks filed 12 October, applicants did not address the typical product slate set forth in Table A of Davis or how the composition claims of this invention

patentably distinguish over the F/T process liquids set forth. In amended claim 1 for example, the F/T derived fuel composition is characterized by a boiling range distribution wherein the 5 wt.% point is (very broadly) at a temperature of 570°F or less and the 95 wt.% point is at or above 730°F. The F/T process liquids in Table A meet these two points. Although applicants point out that Davis recycles any 700°F+ materials to a hydroisomerization reactor where it is cracked into lower molecular weight products, and, thus, Davis does teach that hydrocarbons boiling above 700°F are not useful in the invention, the fact remains that the F/T process liquids set forth in Table A meet the claim limitations for boiling range distribution. And, as previously set forth, the other properties set forth in the claims such as cloud point, kinematic viscosity and sulfur content of the Fischer-Tropsch derived fuel compositions which are not taught by Davis are assumed to be the same or similar unless demonstrated otherwise.

In the F/T derived fuel composition of independent claim 17, which is also characterized by a boiling range distribution and properties such as kinematic viscosity and cloud point, applicants include the proviso that “wherein no more than 30 weight percent of the fuel composition boils between about 500 degrees F and about 600 degrees F”. It is not clear how this limitation distinguishes the claimed composition over the typical product slate from F/T process liquids set forth in Table A wherein 19 wt.% of the process liquids boil in the range of 500-700°F. Also it is not clear from Davis what percentage of the disclosed and claimed F/T derived fuel compositions boil between the range of about 500°F and 600°F, so it is not clear that less than 30 wt.% is significant. In the F/T derived fuel composition of independent claim 31, which is also characterized by a boiling range distribution and properties such as kinematic

viscosity and cloud point, applicants include the proviso that “by displaying a lower toxicity when contacted with a biological system than a conventional diesel fuel”. The examiner is of the position that it is not clear how this limitation distinguishes over the compositions of the prior art because the term “lower” is relative and not all “conventional diesel fuels” have the same toxicity. Also it is not clear what fuels are considered to be conventional diesel fuels (uni-modal boiling range?).

#### ***Claim Objections***

Claim 24 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It is not clear how claim 24 (similar to claim 16 in the previous office action) limits the Fischer-Tropsch fuel composition of independent claim 17.

#### ***Allowable Subject Matter***

Process claims 25-30, which blend together the high boiling fraction and the low boiling fraction whereby the Fischer-Tropsch derived transportation fuel composition is characterized by a bi-modal boiling range, are allowed over the prior art references of record. F/T derived fuel compositions of claims 35-38, which contain a bi-modal boiling range distribution, are also allowed over the prior art references of record.

Art Unit: 1764

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

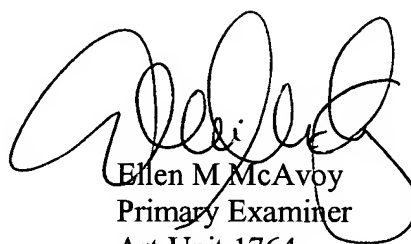
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 1764

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen M. McAvoy  
Primary Examiner  
Art Unit 1764

EMcAvoy  
January 12, 2005